

Table 3.9-1
Criteria for Assessing Visual Impacts Attributable to the
Plymouth Generating Facility

Visual Feature	Foreground	Middleground	Background
Proposed industrial development in a prime or unique farmland setting	High (Significant) Visual Impact	Moderate Visual Impact	Low Visual Impact
Proposed industrial development in a combined agricultural/industrial setting	Moderate Visual Impact	Low Visual Impact	Low Visual Impact
Proposed industrial development in an industrial setting	Low Visual Impact	Minimal Visual Impact	No Visual Impact

Section 3.9.2.3.1). Using this methodology, the primary visual impact concerns would be views of the PGF in the context of existing development and terrain, from foreground, middleground, or background views of PGF.

To assess the impact of light and glare, a comparison of project lighting at night with ambient conditions was made. If nighttime lighting altered ambient lighting such that use of adjacent properties would be affected, impacts were considered to be high (significant). Examples of high (significant) impacts would include preventing or disturbing sleeping patterns in residential areas or creating points of visual interest that would distract drivers on nearby roads.

3.9.2.2 No Action Alternative

The No Action Alternative would not result in any visual impact because the PGF would not be constructed and future views would be the same as the existing views.

3.9.2.3 Proposed Action

3.9.2.3.1 Plant Site

Construction

Construction of the PGF would have short-term impacts on visual quality in the site area. Equipment such as cranes and scaffolding, dust, increased construction traffic on existing roads, and night lighting and glare would be visible from all viewpoints during different periods of construction. Viewers from Viewpoints 5 and 6 (see Figures 3.9-7 and 3.9-8) would have foreground views of plant construction (including night lighting and glare), and would therefore experience high visual impacts. However, because construction activities would be temporary, the overall visual impact is expected to be low. Viewers from other viewpoints would see PGF construction in the middleground or background and experience low and, therefore, less than significant impacts.

Operation

The PGF would be most visible from viewpoints located less than 2 miles from the plant site that show the PGF in the foreground. From viewpoints over 2 miles from the plant site, the plant

would be visible in the background and would not be perceived as a dominant element in the landscape, similar to impacts during construction. Non-reflective, painted materials would be incorporated into the plant design to reduce its visual prominence.

Depending on meteorological conditions, the PGF's wet cooling tower could emit a vapor plume. In the evenings, vapor plumes and night lighting and glare could be visible against a dark sky from all viewpoints. An example of the nighttime view is shown in Figure 3.9-4. Vapor plumes would also be visible during daylight (see Figure 3.9-4).

Given the proposed plant design, location of plant site in relation to viewpoints, and existing development, PGF operation would result in low to moderate impacts to visual resources. A discussion of visual impacts from each viewpoint follows.

Viewpoint 1

From Viewpoint 1 on Christy Road, the plant cooling tower and the upper edge of the heat recovery steam generator (HRSG) would be visible in the middleground over the tops of the orchard trees (Figure 3.9-2). In the evening, night lighting would be visible. Travelers on Christy Road would be moving 35 miles per hour (mph) through the landscape, and their views would be both temporary and dynamic. The change in the view from Viewpoint 1 as a result of the PGF would represent a moderate visual impact.

Viewpoint 2

The proposed plant, the Williams Co. compressor station, and some farm buildings would be visible in the middleground from Viewpoint 2 (see Figures 3.9-3 and 3.9-4). The PGF plant would fit with the existing structures in the landscape, and its addition would be minor. During the night, the plant's night lighting and some vapor would be visible in the middleground (see Figure 3.9-4). As mentioned above, travelers on Christy Road would be moving 35 mph through the landscape and their views would be both temporary and dynamic. The change in the view from Viewpoint 2 as a result of the PGF would represent a low impact.

Viewpoint 3

The proposed plant, the Williams Co. compressor station, and the transmission line towers would be visible in the middleground from Viewpoint 3 (see Figure 3.9-5). In the evening, night lighting would be visible in the background. The PGF would fit with the existing structures in the landscape and its addition would seem minor, especially from this distance. Travelers on SR 14 would be moving 60 or 65 mph through the landscape and their views would be both temporary and dynamic. The view from Viewpoint 3 would not change much as a result of the PGF plant, and would represent a low visual impact.

Viewpoint 4

The proposed plant, Williams Co. compressor station, and the AgriNorthwest grain facility would be visible in the middleground from Viewpoint 4 (see Figure 3.9-6). In the evening, night lighting would be visible in the background. The PGF would fit with the existing structures in the landscape and its addition would be minor, especially from this distance. The view from

Viewpoint 4 would not change much as a result of the PGF plant and would represent a low visual impact.

Viewpoint 5

The proposed plant, Williams Co. compressor station, and a series of power transmission lines would be visible in the foreground from Viewpoint 5 (Residence 6) (see Figure 3.9-7). In the evening, night lighting would be visible in the foreground. Because Residence 6 represents a fixed position, the PGF would be a dominant element in the landscape. However, the plant would be similar in scale and character to the adjacent Williams Co. compressor station, and therefore fit into its immediate context. From Viewpoint 5, the visual change in the landscape as a result of the PGF would be additive. While the PGF would not represent a substantial change from existing conditions, the view of both the Williams Co. compressor station and the proposed plant would have a moderate visual impact. The impacts would be moderate because the PGF would fit into the surrounding combination of industrial and agricultural land uses (see Table 3.9-1).

Viewpoint 6

The proposed plant would be visible alongside the existing Williams Co. compressor station and storage pond in the foreground and middleground views. In the evening, night lighting would be visible in the foreground and middleground. The AgriNorthwest grain facility would be visible in the distance from Viewpoint 6 (see Figure 3.9-8). Because the residents would be viewing from a fixed position, the PGF would be a dominant element in the landscape. However, as with the view from Viewpoint 5, the PGF would be similar in scale and character to the adjacent Williams Co. compressor station, and so would fit into its immediate context. From Viewpoint 6, the visual change in the landscape as a result of the proposed plant would be additive. While the PGF would not represent a substantial change from existing conditions, the view of both the Williams Co. compressor station and the PGF would have a moderate visual impact. Similar to Viewpoint 5 impacts, the impacts would be moderate because the PGF would fit into the surrounding combination of industrial and agricultural land uses (see Table 3.9-1).

Viewpoint 7

The proposed plant would appear in the middleground view adjacent to the Williams Co. compressor station from Viewpoint 7 on the Columbia River (see Figure 3.9-9). In the evening, night lighting would be visible in the middleground view. Because travelers on the river would be moving at varying speeds, the view of the plant would be temporary and dynamic. Therefore, the addition of the PGF in the middleground would represent a low visual impact.

3.9.2.3.2 Transmission Interconnection

Construction

Construction of the transmission interconnection would have short-term impacts on visual quality in the area. Equipment such as cranes would be visible from all viewpoints in the background during construction. Viewpoint 6 would have foreground views of construction

activities that would occur in the daylight. However, views would be temporary and would represent a low visual impact.

Operation

The transmission interconnection would be visible from all viewpoints in the background and would be visible in the foreground from Viewpoint 6 (nearby residence to the north). However, the visual impacts would be low and less than significant because connecting to existing transmission towers in the north would require only four to six new transmission towers, and their visual character would be similar to the existing towers.

3.9.2.3.3 Access Road

Construction

Construction of the proposed access road would have short-term impacts on visual quality. Increased traffic, equipment, and dust associated with construction would be especially visible from residential Viewpoints 5 and 6. There would be no construction in the evening, so there would be no light and glare impacts. Viewpoint 6 would have foreground views, and Viewpoint 5 would have middleground views of the construction activities. Because construction would be temporary, these visual impacts, although in the foreground and middleground, would be low.

Operation

The access road would be an extension of existing roads and, therefore, would have few visual impacts. Traffic on the road, rather than the road itself, would be most visible from residential Viewpoints 5 and 6. The traffic during PGF operation would represent 20 employees working either two or three shifts per day, and would have a low visual impact.

3.9.2.4 Alternate 230-kV Transmission Interconnection

Impacts attributable to the alternate 230-kV transmission interconnection would be the same as those attributable to the proposed transmission interconnection because the 230-kV line is located in the same physical location as the proposed 500-kV line.

3.9.2.5 Alternate Benton PUD/BPA Transmission Interconnection

Construction

Construction of the alternate Benton PUD/BPA transmission interconnection would occur in the daylight and have short-term impacts on visual quality. Equipment such as cranes would be seen in the foreground and would be most visible from Viewpoints 1 (on Christy Road), 5, and 6 (from residences). The visual impacts would be temporary and low.

Operation

The alternate Benton PUD/BPA transmission interconnection would be visible in the foreground and middleground from Viewpoints 1, 5, and 6. The visual impacts would be low and less than

significant because the towers would be replaced with new towers and the number of towers would remain constant. The visual character of the new towers would be similar to the existing towers.

3.9.2.6 Access Alternative

Alternate Construction Access Road

Improvements to the existing road that would be used for the alternate construction access road would involve increased traffic, equipment, and dust. There would be no construction during the evenings, so there would be no light and glare impacts. The construction activities would be seen from Viewpoints 1 (from Christy Road) and 2 (from residences to the west) in the foreground and middleground. The visual impacts would be temporary, low, and less than significant.

Traffic on the alternate construction access road would be temporary and most visible (in background, middleground, and foreground) from residential Viewpoint 2. Use of the alternate construction access road would not create a significant visual impact.

Alternate Operation Access Road

The alternate operation access road would be an extension of an existing road. Paving on a small portion of the road would be the only improvement. This activity would be temporary and would not result in a significant visual impact. Traffic on the alternate operation access road would be visible in the foreground and middleground from Viewpoint 1 (from Christy Road). The alternate operation access road would have more travelers on a permanent basis, but would create low and therefore less than significant visual impact.

3.9.3 SUMMARY OF IMPACTS

Impacts to visual resources attributable to the proposed project would be low during construction and low and moderate during operation, depending on the viewpoint. Therefore, impacts would be less than significant.

As part of the proposed project, project design elements such as a muted color scheme and the sensitive design of night lighting (i.e., shielded lighting if practicable) would be incorporated to decrease the visual impacts of the PGF.

3.9.4 MITIGATION MEASURES

No significant impacts would result, and therefore no mitigation measures are required.

3.9.5 REFERENCES

USDA Forest Service. 1979. "The Visual Management System." Chapter 1 in the *National Forest Landscape Management Handbook*. Volume 2. Agriculture Handbook Number 462. U.S. Government Printing Office. Washington, D.C.

Benton County. No date (n.d.). *Benton County Comprehensive Land Use Plan*.